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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,063	04/06/2004	Keith R. Slavin	500839.02 (29916/US/2)	7234

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EXAMINER

CHOOBIN, BARRY

ART UNIT	PAPER NUMBER
2625	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/820,063

Applicant(s)

SLAVIN, KEITH R.

Examiner

Barry Choobin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50-127 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50-55 and 60-127 is/are rejected.
- 7) ☒ Claim(s) 56-59 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>April 6, 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on April 6, 2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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3. Claims 50-55 and 60-127 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-43 of U.S. Patent No. 6,751,362. Although the conflicting claims are not identical, they are not patentably distinct from each other because limitations of said claims in instant application or merely a broader version of said claims in US patent No. 6,751,362.

As to claim 50, US, 362 claims a method for determining a transition model between input pixel samples from which output sample values are calculated, the input pixel samples having corresponding input sample values, the method comprising (column 14, lines 56-59, claim 1):

Determining from the input sample values a brightness condition (column 14, lines 60-61);

Using a first transition model that preserves a constant luminance where the Brightness condition is indicative of light isolated pixels (column 14, lines 62-64);

Using a second transition model that preserves a constant darkness where the Brightness condition is indicative of dark isolated pixels (column 14, lines 65-67)', and Calculating output sample values from the transition model used (column 15, lines 5-7).

As to claim 51, US, 362 claims the method of claim 50 (see above) wherein the first transition model comprises a cubic polynomial model solved using a light gradient value gnt and a dark gradient value grdk having the values'.

where gm is a display gamma value (see claim 2).

As to claim 52, US, 362 claims the method of claim 51 (see claim 51 above) wherein the display gamma value is equal to 2.5 (see claim 3).

As to claim 53, US, 362 claims the method of claim 50 (see claim 50 above) wherein the second transition model comprises a cubic polynomial model solved using a light gradient value gnt and a dark gradient value $grdk$ having the values'.

where gm is a display gamma value (see claim 4).

As to claim 54, US, 362 claims the method of claim 53 (see claim 53 above) wherein the display gamma value is equal to 2.5 (see claim 5).

As to claim 55, US, 362 claims the method of claim 50 (see claim 50 above), further comprising using a third transition model that is based on a sine-model having an angular frequency of p where the brightness condition is indicative of alternating light and dark pixels (this limitation is embedded in claim 1, column 15, lines 1-4).

As to claim 60, US, 362 claims a method for calculating output sample values from input sample values corresponding to respective input pixel samples, the method comprising (column 15, claim 8, lines 50-53):

Comparing sample values of a selected sample set of input sample values (column 15, claim 8, lines 54-55);

Determining from the sample values of the sample set whether a first, second or third brightness condition is present, the third brightness condition having alternating light and dark pixels (column 15, claim 8, lines 56-58 recites only first or second brightness condition. But in claim 13, which depends on claim 8, further cites a third brightness condition comprising alternating light and dark pixels. Combining the limitation of independent claim and limitations of dependent claim 13 meet the limitations as recited in this portion of the claim);

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Defining a first emphasis model for the sample set in response to detecting the first brightness condition (see column 15, claim 8, lines 59-65);

Defining a second emphasis model for the sample set in response to detecting the second brightness condition (see column 15, claim 8, lines 59-65);

Defining a third emphasis model for the sample set in response to detecting the third brightness condition (see column 16, claim 13, lines 37-38); and

calculating output sample values using the defined emphasis model (column 15, claim 8, lines 66-67).

As to claim 61, US, 362 claims the method of claim 60 (see claim 60 above) wherein first brightness condition comprises an isolated light pixel condition and the second brightness condition comprises an isolated dark pixel condition (column 15, claim 8, lines 62-65).

Claims 62-67 correspond respectively to claims 10-12 and 14-15 of US, 362.

As to claim 68, US, 362 claims in claims 8 and 18 a method for calculating output sample values from input sample values corresponding to respective input pixel samples that are arranged in a coordinate system, the method comprising (see claim 8 and 18 preamble):

Comparing input sample values of a selected sample set of input sample values (column 15, lines 54-55);

Determining from the input sample values of the sample set whether a first or second brightness condition is present (column 15, lines 56-58);

Where the first brightness condition is detected, defining a first emphasis model

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for the sample set and where the second brightness condition is detected, defining a second emphasis model for the sample set (column 15, lines 59-62);

Determining from the input sample values of the sample set whether a diagonal pixel pattern is present (column 16, lines 66-67);

in response to determining the presence of a diagonal pixel pattern, modifying the coordinate system in which the input pixel samples are arranged (column 17, lines 1-3) and calculating a fractional position for the input pixel samples with respect to the modified coordinate system (column 17, lines 4-5);

and calculating output sample values from the input sample values using the defined emphasis model (column 17, lines 5-6), where the presence of a diagonal pixel pattern is determined (column 17, line 1), the input sample values based on the fractional position of the input pixel samples.

As to claim 69, US, 362 claims wherein the first brightness condition comprises an isolated light pixel condition and the second brightness condition comprises an isolated dark pixel condition (column 15, lines 62-65).

Claims 70-79 correspond respectively to claims 9-17 and 19 of US, 362.

As to claim 80, this claim is a system claim, which its functionally is analogous to claim 60 above. Accordingly, claim 80 is analyzed and rejected as claim 60 above.

As to claim 81, this claim is a system claim which its functionally is analogous to claim 61 above. Accordingly, claim 80 is analyzed and rejected as claim 61 above.

As to claims 82-87, these claims are system claims, which their functionalities are analogous to claims 62-67 respectively. Accordingly, claim 82-87 are analyzed and rejected as claim 62-67 above.

As to claim 88, US, 362 recites limitations of claim 88 in claims 13 and 16.

As to claim 89, US, 362 recites limitations of claim 89 in claim 17.

As to claim 90, US, 362 recites limitations of claim 90 in claim 18.

As to claim 91, US, 362 recites limitations of claim 91 in claim 19.

As to claim 92, this claim is a system claim which its functionally is analogous to claim 68 above. Accordingly, claim 92 is analyzed and rejected as claim 68 above.

As to claims 93-103, these claims are system claims, which their functionalities are analogous to claims 69-79 respectively. Accordingly, claim 93-103 are analyzed and rejected as claim 69-79 above.

As to claim 104, limitations of claim 104 are claimed in claim 32 and dependent claim 47 of US, 362.

As to claim 105, limitations of claim 105 are claimed in claim 32, columns 18, lines 49-52 of US, 362.

As to claims 106-109, limitations of these claims are respectively claimed in claims 33-36 of US, 362.

Claims 110-115 correspond to claims 38-43 of US, 362.

Claim 116 corresponds to claims 32 and 42 of US, 362.

As to claim 117, limitations of claim 117 are recited in claim 32, of US, 362 (column 18, lines 49-53).

Claims 118-126 correspond respectively to claims 33-41 of US, 362.

Claim 127, corresponds to claim 43 of US, 362.

Allowable Subject Matter

4. Claims 56-59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry Choobin whose telephone number is 703-306-5787. The examiner can normally be reached on M-F 7:30 AM to 18:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 703-308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Barry Choobin
December 12, 2004

A handwritten signature in black ink, appearing to read 'Barry Choobin', with a long horizontal line extending to the right.